State Permit Number AGU 1403-S-03 Effective Date: June 1, 2014

Expiration Date: May 31, 2019



AUTHORIZATION TO OPERATE A LAND TREATMENT SYSTEM

FOR THE

AGRICULTURAL UTILIZATION OF SLUDGE

1. Pursuant to the provisions of 7 Del. C., §6003

Mountaire Farms of Delaware, Inc. P.O. Box 1320
Millsboro. Delaware 19966

is hereby granted a permit to operate a land treatment system for the agricultural (Silvacultural) utilization of sludge generated by the Mountaire Farms of Delaware, Inc., Millsboro, Delaware, Wastewater Treatment Facility. This permit is limited to the application of stabilized sludge from the Wastewater Treatment Facility at agronomic rates to the site designated below:

<u>The Frame Farm</u>: Approximately 120 acres of forested land contained within a 272 acre parcel lying south of Sussex County Route 314 (Doc Frame Road), east of State Route 30 and west of Sussex County Route 305 (Hollyville Road).

2. The application rates, monitoring requirements and other permit conditions are set forth in Parts I, II and III hereof.

Bryan A. Ashby, Manager

Surface Water Discharges Section

Division of Water

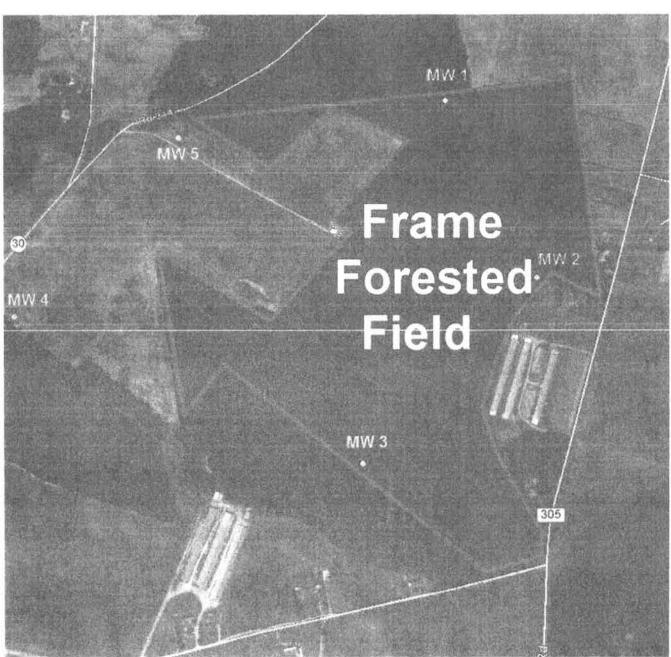
Department of Natural Resources and Environmental Control

Part I

GENERAL DESCRIPTION OF OPERATION

The operation involves the land application of stabilized sludge from the Mountaire Farms of Delaware Inc., Millsboro Poultry Plant to the Frame Farm Pine Plantation where sludge is land applied at Silvacultural rates. The stabilized sludge will be surface applied using tank mounted spray gun equipment mounted on a truck.

Tax parcel number: 234-27.00-19.00



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REGULATORY AND SUPPORTING DOCUMENTS

The land treatment operations shall be conducted in accordance with the following documents:

- The Department's <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>: <u>Part III, (B), the Land Treatment of Sludges and Sludge Products</u> (as revised);
- 2. Sussex County Council Conditional Use No. 1090, December 13, 1994;
- 3. Sussex County Zoning Commission Conditional Use Permit #1569 dated November 30, 2004;
- 4. The request dated August 13, 2007 for the modification of State Permit Number AGU 0026/95 to remove the Udell Tract for Silvacultural application of Biosolids; and,
- 5. The revised Project Development Report (PDR) dated November 4, 2013.

A.1 SLUDGE APPLICATION LIMITATIONS

During the period beginning on the effective date and lasting through the expiration date the permittee is authorized to operate the land treatment site identified in this permit for the application of stabilized sludge at agronomic rates. The timing of sludge application to the site, as well as the quantity and quality of the sludge to be land applied is specified below:

Sludge shall only be applied to approximately 120 acres of forested land contained within a 272 parcel known as the Frame Farm and described in the Project Development Report dated August 30, 2003 and November 4, 2013.

No more than 142 lbs/ac/yr. of plant available nitrogen (PAN) shall be applied annually to the approved land application area. When calculating loading rates residual mineralized nitrogen from previous sludge application(s) shall be deducted from the 142 lbs/ac/yr. of plant available nitrogen (PAN) permit limit, in accordance with Part III, (B), of the <u>Guidance</u> and Regulations Governing the Land Treatment of Wastes.

Supplemental fertilizers containing nitrogen and/or phosphorus shall not be applied to the land application site without prior written approval by the Department.

Fields with "high" phosphorus soil levels (greater than 150 FIV, 150 ppm Mehlich 3, 120 ppm Bray P 1 or 75 ppm Mehlich 1) must have the phosphorus site index (PSI) calculated and the results submitted to the Department. Fields with PSI's above "low" levels (greater than 50) must a phosphorus management plan to the Department, for review and approval, within sixty (60) days of receipt of the soil analytical data. The phosphorus management plan must demonstrate steps that will be taken to reduce the PSI or phosphorus levels in the soil. Fields with "high" phosphorus soil levels must continue to calculate the PSI at least once every (3) three years until the phosphorus level in the soil is no longer "high". Failure to implement a phosphorous management plan, when applicable, may result in the Department invoking the provisions of Part II, B.6 of this permit.

For those portions of the sludge application area where the depth to seasonal high water table is less than 20 inches but greater than 12 inches, sludge application is limited to May, June or July. Sludge shall only be applied when the actual water table depth is at least 20 inches below the ground surface pursuant to Part III, (B), of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>.

A.2. OTHER LIMITATIONS

Only sludge, which has been treated by a Process to Significantly Reduce Pathogens (PSRP), as defined in Part III, (B), of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>, shall be applied to any of the land treatment sites.

Application is forbidden during periods of active rain or onto excessively wet ground. Periods of active rain shall be defined more than .25 inches of rain in an hour. A rain gauge must be mounted and maintained on-site at any farm receiving application during any rainfall. Sludge may not be applied when the ground surface is saturated, frozen or

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covered with snow or during periods of rain or runoff without written Department approval.

Sludge may not be applied from December 7 through February 15 unless the permittee receives written approval from the Department to land apply sludge during this period.

The permittee shall conform to any conditions required by Sussex County ordinance and policy in addition to the conditions contained in this permit.

The sludge shall be applied so that the application is uniform.

Public access to the sludge application areas must be controlled for at least twelve (12) months after sludge application. Additionally, signage worded identical to what was submitted in the project development report (PDR) shall be posted along the perimeter of each land application field immediately before and for at least twelve (12) months after the completion of PSRP sludge land application activities.

Buffer zones established pursuant to Part III, (B), Subsection 138.2 of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u> shall be maintained at all times during sludge application.

No sludge shall be applied if sample analysis yields pollutant concentrations in excess of the following values:

Arsenic	75mg/kg	Cadmium	85 mg/kg	Chromium	3000 mg/kg
Copper	4300mg/kg	Lead	840 mg/kg	Mercury	57 mg/kg
Molybdenum	75mg/kg	Nickel	420 mg/kg	Selenium	100 mg/kg
Zinc	7500 mg/kg	PCB	5 mg/kg		

A.3. GROUNDWATER LIMITATIONS

Application of sludge to the designated fields shall not cause groundwater to be in violation of applicable Federal or State drinking water standards on an average annual basis. Should down-gradient water supply wells (public or private) be impacted above applicable Federal or State drinking water standards from the land application of sludge, the permittee shall be required to provide a free Department approved alternative potable water supply to the affected parties.

B. MONITORING REQUIREMENTS

During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to apply PSRP sludge at agronomic rates to the application sites listed in this permit. Such applications shall be monitored by the permittee as specified below:

B.1 DIGESTED SLUDGE

Parameter	Unit Measurement	Minimum Frequency	Sample Type Composite	
Moisture Content	percent	Twice per year		
Total Nitrogen as N (Moist & Dried)	percent	Twice per year	Composite	
Organic Nitrogen as N (Moist & Dried)	percent	Twice per year	Composite	
Ammonium and Nitrate Nitrogen as N (Moist & Dried)	percent	Twice per year	Composite	
pH	S.U.	Twice per year	Composite	
Volatile Solids	percent	Twice per year	Composite	
Phosphorus as P (dry weight basis)	percent	Twice per year	Composite	
Potassium (dry weight basis)	percent	Twice per year	Composite	
Arsenic (dry weight basis)	mg/kg	Every 3 years	Composite	
Cadmium (dry weight basis)	mg/kg	Every 3 years	Composite	
Chromium (dry weight basis)	mg/kg	Every 3 years	Composite	
Copper (dry weight basis)	mg/kg	Every 3 years	Composite	
Lead (dry weight basis)	mg/kg	Every 3 years	Composite	
Mercury (dry weight basis)	mg/kg	Every 3 years	Composite	
Molybdenum (dry weight basis)	mg/kg	Every 3 years	Composite	
Nickel (dry weight basis)	mg/kg	Every 3 years	Composite	
Selenium (dry weight basis)	mg/kg	Every 3 years	Composite	
Zinc (dry weight basis)	mg/kg	Every 3 years	Composite	
PCB's (dry weight basis)	mg/kg	Every 3 years	Composite	
Calcium (dry weight basis)	mg/kg	Twice per year	Composite	
Sodium (dry weight basis)	mg/kg	Twice per year	Composite	
Priority Pollutant Scan	**************	Every 3 years	Composite	

Digested sludge samples shall be collected at the following location: The secondary aerobic digester.

All sludge samples shall be taken and analyzed in accordance with Part III (B), Section 151 of the Department's <u>Guidance and Regulations Governing the Land Treatment of Wastes.</u> All samples shall be representative of the material that is land applied under this permit. See Part I, F. for reporting requirements.

NOTE: A list of the 126 priority pollutants can be found on 40 CFR, Part 423, Appendix A, 1987.

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B.2 SLUDGE STABILIZATION PROCESS MONITORING:

Aerobically digested sludge must meet one of the following processes to achieve PSRP requirements:

All sludge prepared for land application at the sites approved in this permit must meet the requirements in Part III, Section 133.1.1 of the <u>Guidance and Regulations</u> <u>Governing the Land Treatment of Wastes</u>. The permittee shall obtain seven samples of the sludge at the time the sludge is to be utilized for land application. The geometric mean of the density of fecal coliform in the samples shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis). No sludge shall be land applied prior to the permittee demonstrating the stabilization requirements have been achieved.

Or

It shall be demonstrated that sludge meets the time and temperature process monitoring requirements as set forth in subsection 133.1.2.1 in Part III, (B) of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>, on a continual basis.

<u>NOTE:</u> Alternative processes shall be approved in writing prior to implementation. See Part I, F for reporting requirements.

B.3 VECTOR ATTRACTION REDUCTION:

Vector attraction reduction must be achieved by alternative (a), 38% volatile solid reduction, as specified in Part III, (B), Subsection 135.2.1 of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u> shall be demonstrated prior to surface application. Other alternative methods for achieving vector attraction reduction found in Subsection 135 of Part III, (B), of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>, may be employed with prior written Departmental approval.

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B.4 SOIL MONITORING

Parameter	Unit of Measurement	Minimum Frequency	Sample Type	
pH	S.U.	Annually*	Composite	
Total Nitrogen as N (dry soil basis)	mg/kg	Annually*	Composite	
Total Phosphorus as P (dry soil basis)	mg/kg	Annually*	Composite	
Potassium (dry soil basis)	mg/kg	Annually*	Composite	
Arsenic (dry soil basis)	mg/kg	Every 5 years*	Composite	
Cadmium (dry soil basis)	mg/kg	Every 5 years*	Composite	
Chromium (dry soil basis)	mg/kg	Every 5 years*	Composite	
Copper (dry soil basis)	mg/kg	Every 5 years*	Composite	
Lead (dry soil basis)	mg/kg	Every 5 years*	Composite	
Mercury (dry soil basis)	mg/kg	Every 5 years*	Composite	
Molybdenum (dry soil basis)	mg/kg	Every 5 years*	Composite	
Nickel (dry soil basis)	mg/kg	Every 5 years*	Composite	
Selenium (dry soil basis)	mg/kg	Every 5 years*	Composite	
Zinc (dry soil basis)	mg/kg	Every 5 years*	Composite	
Aluminum (dry weight basis)	mg/kg	Annually*	Composite	
Magnesium (dry soil basis)	mg/kg	Annually*	Composite	
Manganese (dry soil basis)	mg/kg	Annually*	Composite	
Iron (dry weight basis)	mg/kg	Annually*	Composite	
Sodium (dry soil basis)	mg/kg	Annually*	Composite	
% Organic Matter	Percent	Annually"	Composite	

NOTE: Composite soil samples representing each soil series identified within each sludge application area shall be collected. Soil chemistry testing must be in accordance with the Methods of Soil Analysis published by the American Society of Agronomy, and in accordance with Part III, (B), Section 151 of the Department's Guidance and Regulations Governing the Land Treatment of Wastes. See Part I, F, for reporting requirements.

The Department may modify the sampling frequency based upon review of continuing or additional analyses.

B.5 PLANT TISSUE AND LEAFLITTER ANALYSIS

Not required at this time.

^{*} Parameters not required to be sampled if digested studge, is not applied during the "minimum frequency" periods.

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B.6 GROUNDWATER MONITORING

Parameter	Unit of Measurement	Minimum Frequency	Sample Type
Depth to Water	Hundredths of a foot	Quarterly	In-Situ
рН	S.U.	Quarterly	Field Test
Dissolved Oxygen	mg/l	Quarterly	Field Test
Specific Conductivity	UMHOS/CM	Quarterly	Field Test
Temperature	°C	Quarterly	Field Test
Total Dissolved Solids	mg/l	Quarterly	Grab
Total Nitrogen as N	mg/l	Quarterly	Grab
Organic Nitrogen	mg/i	Quarterly	Grab
Nitrate + Nitrite Nitrogen	mg/l	Quarterly	Grab
Ammonium as N	mg/l	Quarterly	Grab
Total Phosphorus	mg/l	Quarterly	Grab
Chloride	mg/l	Quarterly	Grab
Sodium	mg/l	Quarterly	Grab
Arsenic, Total	mg/l	Every 5 Years	Grab
Cadmium, Total	mg/l	Every 5 Years	Grab
Chromium, Total	mg/l	Every 5 Years	Grab
Copper, Total	mg/l	Every 5 Years	Grab
Lead, Total	mg/l	Every 5 Years	Grab
Mercury, Total	mg/l	Every 5 Years	Grab
Molybdenum, Total	mg/l	Every 5 Years	Grab
Nickel, Total	mg/l	Every 5 Years	Grab
Selenium, Total	mg/l	Every 5 Years	Grab
Zinc, Total	mg/l	Every 5 Years	Grab
Fecal Coliform	Colonies/100ml	Annually	Grab

^{*} Groundwater samples shall be collected and analyzed individually from the five (5) monitoring wells at the Frame Farm. Groundwater samples shall be take in compliance with the monitoring requirements specified above and shall be taken at each monitoring well in accordance with procedures approved by the Department and listed in the Department's Field Manual for Groundwater Sampling (March, 1988).

^{**} Groundwater monitoring results for each monitoring well shall be reported using the State of Delaware Well Identification Tag Number that is required on all wells in accordance with the Delaware Regulations Governing the Construction and Use of Wells, Section 10, A.

C. SCHEDULE OF COMPLIANCE

Not required at this time.

D. BONDING

As a requirement for maintaining this permit, the permittee shall file with the Department a bond or other security on a form approved by the Department. The bond shall be payable to the Department and the obligation of the bond shall be conditioned upon the fulfillment of all requirements related to this permit. Liability under the bond shall remain in effect until the expiration date of this permit. A bond in the amount of \$25,000 shall be executed by the applicant and by a corporate surety licensed to do business in this State. Instead of having a bond executed by a corporate surety, the applicant may elect to deposit in an escrow account set up by the permittee, filing copies of the escrow agreement with the Department, cash or negotiable bonds of the federal government or of this State or any other securities acceptable to the Department. The amount of the cash deposit or the market value of any securities shall be at least equal to the required sum of the bond. The Department shall receive and hold the cash or securities in trust, for the purpose for which the deposit is posted. The obligation of the applicant and of any corporate surety under the bond shall become due and payable, and all or any part of any cash or securities shall be applied to payment of the costs of properly fulfilling any requirement of the Permit if the Department has:

- 1. Notified the applicant and any corporate surety that the conditions of the permit have not been fulfilled, and specified in the notice the particular deficiencies in the fulfillment of the permit conditions.
- 2. Given the applicant and any corporate surety a reasonable opportunity to correct the deficiencies and to fulfill all of the conditions of the permit; and
- 3. Determined that, at the end of a reasonable length of time, some or all of the deficiencies specified in Part I, D.1., above, remain uncorrected.

E. MONITORING

1. Representative Sampling:

Samples and measurements taken as required herein shall be representative of the volume and nature of the sludge to be land applied.

2. The permittee shall automatically resample the sludge and submit to the Department and landowner additional analyses if there has been a significant change (greater than 25%) in the quality of sludge. The permittee shall then be required to recharacterize the sludge in order to determine if any change in the land limiting constituent has occurred. Any change in sludge characteristics that affects the land limiting constituent shall be included in revised Project Development Reports which shall be submitted to the Department. After a review of these results, the Department may invoke the provisions of Part II, B.6 of this permit.

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3. Recording of Results:

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a) The exact place, date and time of sampling and/or measurement;
- b) The person(s) who performed the sampling and/or measurement;
- The dates the analyses were performed and the time the analyses were begun;
- The person(s) who performed the analyses;
- e) The results of each analysis.

Records Retention:

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for five (5) years. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

F. REPORTING

- 1. The permittee shall submit to the Department and landowners an annual operation report on or before February 1 of each year. The annual report shall be in a format acceptable to the Department. The annual operation report shall include the following:
 - a) The daily operational record (as specified in Part II, A.1);
 - b) The weight (wet and dry tons) and volume of sludge utilized at the land application site;
 - c) Any changes in ownership of the land where the operation is conducted or any change in any lease agreement for the use of such land that may affect or alter the operator's rights upon such land;
 - d) A chemical analysis of soil from each field for the constituents identified in Part I, B.4. The results shall be compared to the corresponding soil data submitted as a part of the Project Development Reports. The procedure for soil analysis shall be consistent with Department guidance.
 - e) Site maps of the same scale and contour interval as the maps submitted with the Project Development Reports, showing the boundaries within each

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field where sludge has been applied during the previous year.

- f) For each site: the cropping scheme followed during the previous year and anticipated for the coming year; Crop yield data and an explanation of which portions of the plants were harvested; Results of plant tissue and grain analyses, if required; Identification of fields to be used during the coming year; Sludge application rates for the coming year based on nitrogen mineralization calculations from previous sludge application practices;
- g) Sludge application rate adjustments, if necessary (See Part I, A.1.); and
- h) Any other information required by the Department.
- 2. Sludge analytical and stabilization process monitoring data obtained during the previous monitoring period shall be summarized for that period and postmarked no later than the 28th day of the month following the completed reporting period.

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL, DIVISION OF WATER, SURFACE WATER DISCHARGES SECTION, 89 KINGS HIGHWAY, DOVER, DE 19901. TELEPHONE: 302-739-9946

When submitting monitoring results, copies of the original laboratory sheets should be included. If more than one sample is analyzed during any month, a table showing the range of constituent concentration values shall be prepared and included with the submittal.

Test Procedures

Test procedures for laboratory analyses shall conform to the applicable test procedures identified in Part III, (B), Section 152 of the Department's <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>, unless otherwise specified in this permit.

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G. DEFINITIONS

- 1. <u>"Agricultural Utilization"</u> means the application rate of wastes or sludge or sludge products that shall not exceed the nutrient needs of the crop grown on the particular soil plus the other assimilative pathways in soils (e.g., immobilization with organic material, volatilization, and leachate in compliance with drinking water standards). This term may be used interchangeably with "agronomic rate"
- 2. "Composite" means a series of grab samples which have been collected in a manner such that the final sample is representative of the volume and characteristics of the material to be analyzed.
- 3. "Forest Management Activities" are practices, techniques or activities which are designated for the purpose of conserving, protecting, or enhancing land as forestland over the long term.
- 4. "Land Application" means the placement of sludge, treated sludge, or any other product containing these materials within 2 feet below the surface of land used to support vegetative growth.
- 5. "Land Treatment" means a technology for the intimate mixing or dispersion of wastes into the upper zone of the plant-soil system with the objective of microbial stabilization, immobilization, selective dispersion, or crop recovery leading to an environmentally acceptable assimilation of the waste.
- 6. "PSRP" means Process to Significantly Reduce Pathogens.
- 7. "Sewage" means water-carried human or animal wastes from septic tanks, water closets, residences, buildings, industrial establishments, or other places, together with such groundwater infiltration, subsurface water, admixture of industrial wastes or other wastes as may be present.
- 8. "Sewage sludge" means sludge which derives in whole or in part from sewage.
- 9. "Silvacultural" means any forest management activity including but not limited to: the harvest of timber, construction of roads and trails for the purpose of forest management, and preparation of property for reforestation.
- 10. "Sludge" means the accumulated semi-liquid suspension, settled solids, or dried residue of these solids that is deposited from (a) liquid waste in a municipal or industrial wastewater treatment plant, (b) surface or groundwater treated in a water treatment plant, whether or not these have undergone treatment. Septage is included herein as sludge.
- 11. "<u>Treatment</u>" means a process which alters, modifies or changes the biological, physical, or chemical characteristics of sludge or liquid wastes.
- 12. "<u>Vector Attraction</u>" is the characteristic of sewage sludge that attracts rodent, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Part II

A. MANAGEMENT REQUIREMENTS

- 1. Land Application of Sludge
 - a) Sludge shall be applied to the site evenly by means of a coarse spray over the forested tract. The permittee shall ensure that ponding and excessive aerosol formation are minimized during application.
 - b) The permittee shall prepare and maintain an operational record for each day that sludge is applied and when any other management activities are conducted at the land application sites. The daily operational record shall include the following:
 - 1) The date, type, and wet and dry weights of the sludge applied;
 - 2) The facility from which the sludge originated;
 - 3) A record of any major deviations from the operating plan;
 - 4) General daily weather conditions;
 - 5) The application rate for sludge;
 - 6) A map for each site showing the area of daily activity;
 - A record of all actions taken to correct violations of the Delaware Environmental Protection Act and the Department's Regulations; and,
 - 8) Management undertaken, such as planting and harvesting of crops, fertilizers and chemicals added, frequency of irrigation, techniques used, etc.

2. Change in Operation

The application of sludge to the site authorized herein shall be consistent with the terms and conditions of this permit. The application of sludge at levels in excess of the amount necessary to provide plant available nitrogen for the crop being grown, in accordance with the limits identified in Part I, A.I, 2, and 3 of this permit, shall constitute a violation of the permit. Any anticipated facility expansion, production increase, or change in site conditions that would affect the land limiting constituent, create a new land limiting constituent, or adversely affect site conditions must be reported to the Department. Upon review of this information, the Department may invoke the provisions of Part II, B.6 of this permit.

3. Noncompliance Notification

The permittee shall report to the Department:

- a) In writing thirty (30) days before any planned physical alteration or addition to the permitted facilities or activities, if that alteration or addition would result in any significant change in information that was submitted during the permit application process;
- b) In writing thirty (30) days before any anticipated change that would result in noncompliance with any permit condition or Part III, (B), of the <u>Guidance</u> and <u>Regulations Governing the Land Treatment of Wastes</u>;
- c) Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance that may endanger the public health or the environment, at (302) 739-9946 during normal working hours, or (800) 662-8802 after normal working hours, and;
- d) In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department.

This report shall contain:

- A description of the noncompliance and its cause;
- The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- 3) Steps taken or planned to reduce or eliminate reoccurrence of the noncompliance.
- e) In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Department. Those facts or the correct information shall be included as a part of this report.

4. Minimize Impacts

The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance.

B. RESPONSIBILITIES

1. Renewal Responsibilities

At least 180 days before the expiration date of this permit, the permittee shall submit a new application for a permit or notify the Department of the intent to cease operation by the expiration date. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

2. Entry and Access

The permittee shall allow the Department, consistent with 7 <u>Del. C.</u>, Chapter 60, to:

- a) Enter the permitted facility;
- b) Inspect any records that must be kept under this permit;
- c) Inspect any facility, equipment, practice, or operation permitted or required by this permit;
- d) Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility or land application site.

3. Provide Information

The permittee shall furnish to the Department within a reasonable time, any information requested, including copies of records, which may be used by the Department to determine whether cause exists for modifying, revoking, reissuing, or terminating the permit, or to determine compliance with the permit or of Part III, (B), the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>.

4. Transfer of Ownership or Control

This permit shall be transferable to a new owner or operator provided that the permittee notifies the Department by requesting a minor modification of the permit before the date of transfer and provided that the transferee shows evidence of a legal right to use the site and is otherwise in compliance with all applicable provisions of Part III, (B), of the Department's <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>.

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5. Operation of Facility

The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with this permit or Part III, (B), of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u>.

6. Permit Revocation and Modification

- a) After notice and opportunity for a hearing, this permit may be modified or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - 1) Violation of any terms or conditions of this permit;
 - 2) Obtaining this permit by misrepresentation or failure to fully disclose all of the relevant facts:
 - 3) Any change in operating conditions that requires either a temporary or permanent permit modification; or
 - 4) If the Department finds that the public health, safety or welfare requires emergency action, the Department shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Department shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with 7 Del. C., Chapter 60.
- b) The Department may revoke this permit if the permittee violates any permit condition, any provisions of Part III, (B), of the <u>Guidance and Regulations</u> <u>Governing the Land Treatment of Wastes</u>, or fails to pay applicable Department fees.

7. Permit Closure Report

- a) All land approved for the Agricultural Utilization of sludge is required to have a closure report when the land is no longer being utilized as described in permit application. The report must be submitted to the Department within four (4) months of determination that the field will no longer be utilized for Biosolids application. The closure report will have the following:
 - Letter from permittee stating the application site (with tax parcel number(s)) will no longer receive Biosolids approved by this Permit;
 - Copy of the last Biosolids monitoring results as required in Part 1, B.1 of this permit;

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- Copy of the last soil monitoring results as required in Part 1, B.4 of this permit. A soil test is required <u>after</u> the last land application of sludge;
- 4) Copy of the last groundwater monitoring well results as required in Part 1, B.6 of this permit. A groundwater test is required <u>after</u> the last land application of sludge (If monitoring was previously required).

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 7 <u>Del. C.</u>, Chapter 60.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application or any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

12. Compliance Required

The permittee shall comply with all conditions of the permit.

13. Reopener

In the event that the Part III, B, of the <u>Guidance and Regulations Governing the Land Treatment of Wastes</u> or applicable Federal Regulations are revised, this permit may be reopened and modified accordingly after notice and opportunity for a public hearing.

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PART III

A. SPECIAL CONDITIONS

The permittee must ensure that the following conditions are met:

- 1. Monitoring wells
 - a) Groundwater shall be sampled at the following locations at the frequencies indicated.
 - 1) Frame Farm: Groundwater shall be sampled per the frequency listed in Part I, Subsection B. 6. at the five (5) monitoring wells.
 - b) All monitoring wells samples shall be analyzed for the parameters listed in Part I, Subsection B.6 of this permit.
 - Copies of the laboratory reports for all groundwater analytical data and the corresponding sampling logs shall be submitted to the Department within thirty days of the sampling date. In addition, the elevation of the top of the casing (TOC) for each monitoring well shall be surveyed in reference to a permanently marked, stationary point. After notice and opportunity for a hearing, the Department may modify the list of parameters specified above based on observations of groundwater quality trends in the area. Groundwater monitoring shall continue in effect until the Department determines that it is no longer necessary.
- Only sludge meeting the requirements for stabilization and the processed to significantly reduce pathogens by methods approved by the Department and as specified in this permit may be land applied.
- 3. Sludge shall be transported to the site in accordance with Delaware Waste Transporters Permit No. OH-091.
- 4. Pre Start-Up (Must be accomplished annually for each application site)
 - a) Prior to the application of sludge, buffer zones and the areas on which sludge is to be applied must be clearly marked with stakes or other suitable markers acceptable to the Department.
 - b) The permittee must notify the Department at (302) 739-9946 at least two (2) working days prior to initial seasonal application.
 - c) Before the permittee can begin to apply sludge to the designated site, the Department may conduct a pre start-up inspection to verify that proper buffer zones and non-application areas are suitably marked. Based on the results of the pre-startup inspection, the Department will either:

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- 1) Grant approval for sludge application operations to begin or;
- 2) Require the permittee to perform additional site preparation (such work must be performed and approved prior to sludge application);

5. Application Measures

The permittee will follow the application measures as outlined in the 2013 revised Project Development Report and the Guidance and Regulations Governing the Land Treatment of Wastes, and conditions of this permit.

- 6. Post Application Measures
 - a) Any changes in the implementation or continuance of this project must be approved by the Department.
 - b) The Annual Report shall be submitted to the Department as required in Part I, F.1 of this permit. Should the permittee fail to supply the required documents on or before the deadline specified, the Department may revoke this permit.
- 7. If, for any reason, any of the contracts or agreements specified in the Project Development Report any one of the approved sites is cancelled or amended, approval granted for use of that site shall be void.
- 8. Supersedes Previous Permit

This permit supersedes the State Permit No. AGU 0803-S-03, effective December 1, 2008